

AMENDMENTS TO THE CLAIMS:

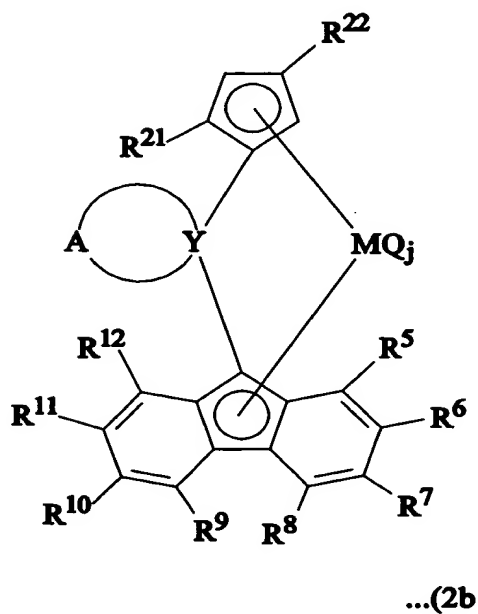
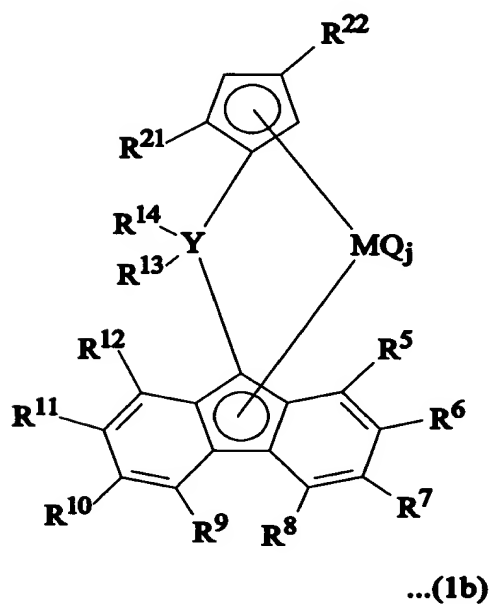
This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Canceled)

Claim 2 (Canceled)

3. (Previously Presented) A metallocene compound represented by the following formula (1b) or (2b):



wherein R^{21} and R^{22} may be the same or different and are each selected from a hydrocarbon group or a silicon-containing hydrocarbon group; R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} and R^{14} may be the same or different and are each selected from a hydrogen atom, a hydrocarbon group or a silicon-containing hydrocarbon group; of the groups indicated by R^5 to R^{12} , neighboring groups may be bonded to form a ring; and when R^{22} is tert-butyl and R^{13} and R^{14} are methyl, R^6 , R^7 , R^{10} and R^{11} are not all hydrogen; when all of R^5 to R^{12} are hydrogen, R^{22} is a hydrocarbon other than phenyl, and when R^7 and R^{10} are both tert-butyl and R^5 , R^6 , R^8 , R^9 , R^{11} and R^{12} are all hydrogen, R^{22} is not methyl, tert-butyl or trimethylsilyl; A is a divalent hydrocarbon group of 2 to 20 carbon atoms which may contain an unsaturated bond and/or an aromatic ring; A may contain two or more cyclic structures including a ring formed by A in cooperation with Y; M is a metal selected from Group 4 of the periodic table; Y is a carbon atom or a silicon atom; j is an integer of 1 to 4; Q is selected from the group consisting of a halogen atom, a hydrocarbon group, an anionic ligand and a neutral ligand capable of coordination by a lone pair; and when j is 2 or greater, each Q may be the same or different.

Claims 4-7 (Canceled)

8. (Currently Amended) An olefin polymerization catalyst comprising the metallocene compound of ~~claims 2 or~~ claim 3.

9. (Currently Amended) An olefin polymerization catalyst comprising:

(A) the metallocene compound of ~~claims 2 or~~ claim 3, and

(B) at least one compound selected from:

(B1) an organometallic compound,

(B-2) an organoaluminum oxy-compound, and

(B-3) a compound which reacts with the metallocene compound (A) to form an ion pair.

10. (Previously Presented) An olefin polymerization catalyst of claim 9 and (C) a particle carrier.

Claims 11-19 (Canceled)

20. (Previously Presented) A process for preparing a polyolefin comprising polymerizing or copolymerizing an olefin in the presence of the olefin polymerization catalyst of claim 8.

21. (Currently Amended) The process for preparing a polyolefin as claimed in claim 20, wherein the metallocene compound is the metallocene compound represented by the formula ~~(1a) or (2a)~~ (1b) or (2b), and at least 2 kinds of olefins are copolymerized.

22. (Currently Amended) The process for preparing a polyolefin as claimed in claim 20, wherein the metallocene compound is the metallocene compound represented by the formula ~~(1a) or (2a)~~ (1b) or (2b), and a single olefin is polymerized.

23. (Previously Presented) A process for preparing a polyolefin comprising polymerizing or copolymerizing an olefin in the presence of the olefin polymerization catalyst of claim 9.

24. (Currently Amended) The process for preparing a polyolefin as claimed in claim 23, wherein the metallocene compound (A) is the metallocene compound represented by the formula ~~(1a) or (2a)~~ (1b) or (2b), and at least 2 kinds of olefins are copolymerized.

25. (Currently Amended) The process for preparing a polyolefin as claimed in claim 23, wherein the metallocene (A) compound is the metallocene compound represented by the formula ~~(1a) or (2a)~~ (1b) or (2b), and a single olefin is polymerized.

26. (Previously Presented) A process for preparing a polyolefin comprising polymerizing or copolymerizing an olefin in the presence of the olefin polymerization catalyst of claim 10.

27. (Currently Amended) The process for preparing a polyolefin as claimed in claim 26, wherein the metallocene (A) compound is the metallocene compound represented by the formula ~~(1a) or (2a)~~ (1b) or (2b), and at least 2 kinds of olefins are copolymerized.

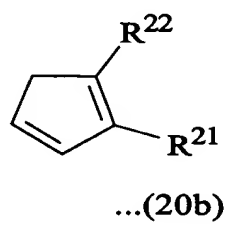
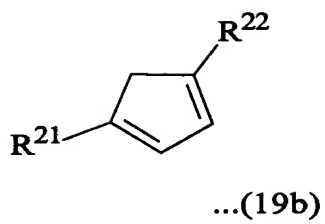
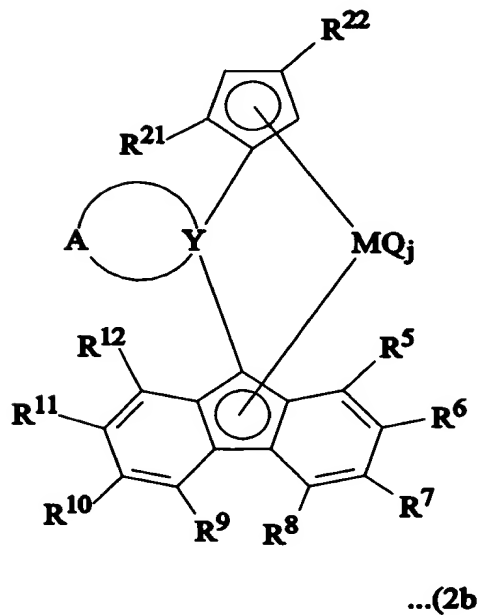
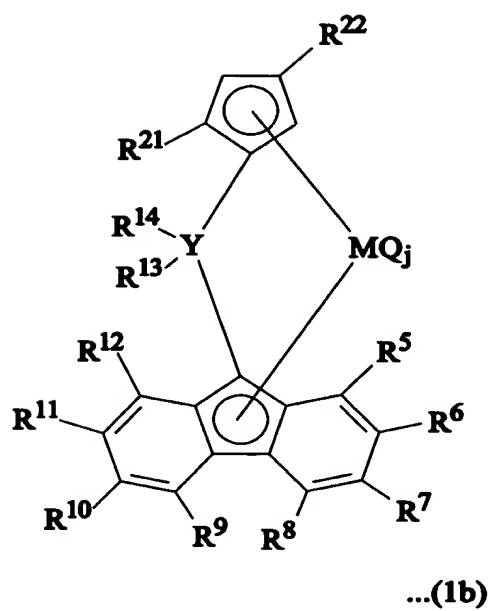
28. (Currently Amended) The process for preparing a polyolefin as claimed in claim 26, wherein the metallocene (A) compound is the metallocene compound represented by the formula ~~(1a) or (2a)~~ (1b) or (2b), and a single olefin is polymerized.

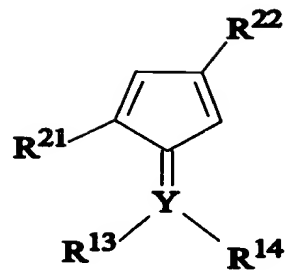
29. (Previously Presented) A process for preparing a metallocene compound, comprising selectively preparing a metallocene compound represented by the following formula (1b) or (2b) from a cyclopentadiene represented by the following formula (19b) as a starting material which is free of isomer represented by formula (20b), said process comprising the steps of:

converting the cyclopentadiene of formula (19b) to a precursor compound represented by the following formula (13b) or (14b),

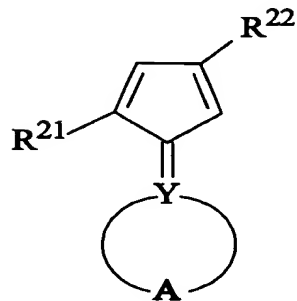
converting the precursor compound of formula (13b) or (14b) to a ligand precursor represented by the formula (7b) or (8b), and

forming the metallocene compound represented by the following formula (1b) or (2b) from the ligand precursor represented by the formula (7b) or (8b);

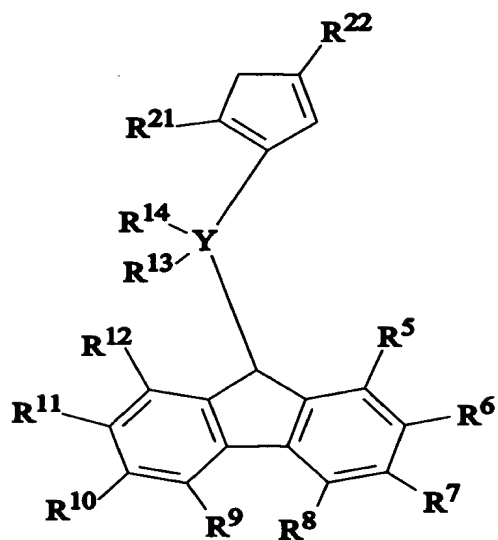




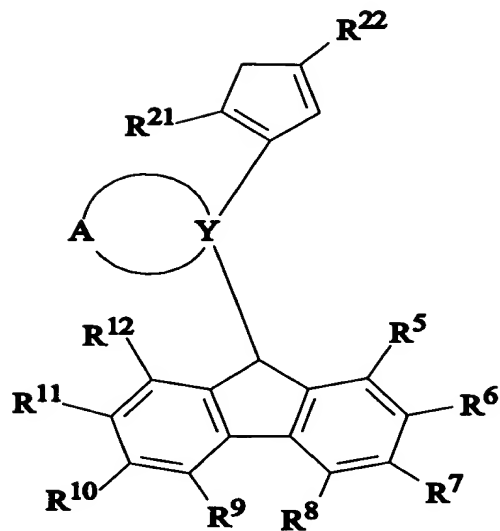
...(13b)



...(14b)



...(7b)



...(8b)

wherein R^{21} and R^{22} may be the same or different and are each selected from a hydrocarbon group or a silicon-containing hydrocarbon group; R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} and R^{14} may be the same or different and are each selected from a hydrogen atom, a hydrocarbon group and a silicon-containing hydrocarbon group; of

the groups indicated by R^5 to R^{12} , neighboring groups may be bonded to form a ring;

and

when R^{22} is tert-butyl and R^{13} and R^{14} are methyl, R^6 , R^7 , R^{10} and R^{11} are not all hydrogen;

when all of R^5 to R^{12} are hydrogen, R^{22} is a hydrocarbon other than phenyl,

when R^7 and R^{10} are both tert-butyl, and R^5 , R^6 , R^8 , R^9 , R^{11} and R^{12} are all hydrogen, R^{22} is not methyl, tert-butyl or trimethylsilyl;

A is a divalent hydrocarbon group of 2 to 20 carbon atoms which may contain an unsaturated bond and/or an aromatic ring; A may contain two or more cyclic structures including a ring formed by A in cooperation with Y; M is a metal selected from Group 4 of the periodic table; Y is a carbon atom or a silicon atom; j is an integer of 1 to 4; Q is selected from the group consisting of a halogen atom, a hydrocarbon group, an anionic ligand and a neutral ligand capable of coordination by a lone pair; and when j is 2 or greater, each Q may be the same or different.